

What is claimed is:

1. A surgical system for delivery of viscous fluid, comprising a housing having a handle portion and a coupling portion extending generally transverse to the handle portion, a reservoir member for engaging with the housing, the reservoir member being adapted to receive a viscous fluid prior to engagement with the housing, and a plunger member adapted to be inserted into the coupling portion and translated through the reservoir member via engagement of the plunger member with the coupling portion.
2. The system of claim 1 wherein the plunger member comprises a knob and a threaded member integrally formed with the knob.
3. The system of claim 2 wherein a portion of the knob is generally hemispherical, and a portion of the knob is generally undulating in cross-section.
4. The system of claim 3 wherein the portion of the knob that is generally hemispherical is a compression surface.
5. The system of claim 2 wherein the threaded member is adapted to engage a threaded region formed on an inner surface of the coupling portion.
6. The system of claim 1 further comprising an orifice defined through a distal end of the reservoir member.
7. The system of claim 6 further comprising a tubing inserted through the reservoir member via the orifice.
8. The system of claim 1 wherein the handle portion of the housing comprises an undulating surface.
9. The system of claim 2 wherein the plunger member further comprises a plunger head disposed on the plunger member, the plunger head being adapted to engage and drive the viscous fluid through the reservoir.

10. The system of claim 9 wherein the plunger head is flared outward to have a circumference of substantially equal size as the circumference of an inner annular surface of the reservoir.

11. The system of claim 1 wherein the distal end of the housing comprises a threaded annular flange for receiving a corresponding threaded proximal end of the reservoir member in a sealed engagement.

12. The system of claim 1 wherein the handle portion extends obliquely from the coupling portion to define an obtuse angle between the handle portion and the coupling portion.

13. The system of claim 9 wherein the diameter of the knob is larger than the diameter of the plunger head.

14. A surgical system for delivery of viscous fluid, comprising a reservoir member for storing a viscous fluid, the reservoir member having an orifice defined in an end thereof, a plunger member adapted to engage the reservoir member in a threaded engagement, and a mixer assembly extending through the plunger member, the mixer assembly being rotatable to mix the viscous fluid, wherein the plunger member is adapted to be translated through the reservoir member to eject the viscous fluid through the orifice of the reservoir member.

15. The system of claim 14 wherein the reservoir member further comprises an opening formed in an end of the reservoir member opposing the orifice end, the opening being adapted to receive the plunger member.

16. The system of claim 15 further comprising a funnel adapted to be inserted into the opening for aiding in the delivery of viscous fluid into the reservoir member.

17. The system of claim 14 wherein the plunger member is generally T-like in shape.

18. The system of claim 14 wherein the mixer assembly comprises a mixer and a mixer handle connectable with the mixer.

19. The system of claim 18 wherein the mixer includes a receptacle defined therein for receiving a corresponding post extending from the mixer handle.

20. The system of claim 18 wherein the mixer is adapted to be inserted into a first end of the plunger member and the mixer handle is adapted to be inserted into a second end of the plunger member, the second end opposing the first end.

21. The system of claim 18 wherein the mixer comprises a mixer head disposed on an end of the mixer, the mixer head having a plurality of mixer blades.

22. The system of claim 21 wherein the mixer blades each comprise a slot defined therethrough.

23. The system of claim 18 wherein the plunger member includes a bore defined therethrough, the bore defining an annular surface of the plunger member.

24. The system of claim 23 wherein the annular surface of the plunger member is threaded along a portion thereof.

25. The system of claim 24 wherein the mixer includes a threaded surface for engaging with the threaded portion of the inner annular surface of the plunger member.

26. The system of claim 14 wherein the reservoir member includes an undulating surface along a portion thereof.

27. A surgical system for delivery of viscous fluid, comprising means for storing a viscous fluid, means for ejecting the viscous fluid from the means for storing, and means for mixing the viscous fluid within the means for storing, the means for mixing being movable within the means for ejecting.

28. A surgical system for delivery of viscous fluid, comprising:

- a housing having a coupling portion and a handle portion extending obliquely from the coupling portion;
- a reservoir member having a threaded portion to engage with a threaded annular flange defined at a first end of the housing, the reservoir member being adapted to store viscous material therein;
- a plunger member insertable into a second end of the housing opposing the first end of the housing, the plunger member having a threaded member to engage a threaded annular surface of the coupling portion; and
- a plunger head disposed on an end of the plunger member, the plunger head being adapted to drive and eject viscous fluid from the reservoir member via actuation of the plunger member.

29. The system of claim 28 wherein the plunger member further comprises a knob wherein a portion of the knob includes a generally hemispherical compression surface, and a portion of the knob includes a generally undulating surface.

30. A surgical method for delivering viscous fluid to an implant site, comprising:

- providing a modular delivery system, the delivery system having a housing, a plunger member engageable with a first end of the housing, and a reservoir member engageable with a second end of the housing;
- loading viscous fluid into the reservoir member;
- engaging the reservoir member with the housing;
- engaging the plunger member with the housing; and
- actuating the plunger member through the housing and into the reservoir member to eject viscous fluid from the reservoir member.

31. The method of claim 30 wherein engaging the reservoir member with the housing comprises engaging a threaded end of the reservoir member with a threaded annular flange of the housing.

32. The method of claim 30 wherein engaging the plunger member with the housing comprises inserting the plunger member into the housing and engaging a threaded portion of the plunger member with a threaded annular surface of the housing.

33. The method of claim 30 wherein actuating the plunger member comprises applying a compressive force and a rotational force to a knob provided with the plunger member.

34. A surgical method for delivering implant material to an implant site, comprising:

providing a plunger member having a bore defined therethrough;  
disposing a mixer assembly through the bore of the plunger member;  
inserting the plunger member into a reservoir member, the reservoir member having viscous fluid therein;  
actuating the mixer assembly to mix the viscous fluid in the reservoir member; and  
actuating the plunger member to eject viscous fluid from the reservoir member.

35. The method of claim 34 wherein the mixer assembly comprises a mixer and a mixer handle, the mixer being adapted to engage the plunger member in a threaded engagement through a first opening defined by the bore, and the mixer handle being adapted to be disposed through a second opening defined by the bore to connect with the mixer.

36. The method of claim 34 wherein inserting the plunger member into the reservoir member comprises engaging a threaded surface of the plunger member with a threaded annular surface of the reservoir member.

37. The method of claim 34 wherein actuating the mixer assembly comprises applying a compressive force and a rotational force to a knob provided with the mixer handle.